Radon Measurement and Mitigation In Karst Areas Workshop

May 5, 2009 – Louisville, Kentucky

The Radon Measurement and Mitigation in Karst Areas Training is an advanced course and is being offered through assistance from the Kentucky Radon Program, University of Kentucky, Western Kentucky University, the Barren River Health Department and the Southern Regional Radon Training Center (SRRTC) at Auburn University. Clay Hardwick is the contact for the Kentucky Radon Program. Visit the website at http://www.chfs.ky.gov/dph/info/phps/radongas/ or call 502-564-4856.

SRRTC will conduct the training and will offer continuing education credits for certified radon measurement and mitigation specialists. This workshop features case studies from the Tennessee House Investigation Training project held in Livingston, Tennessee, in which measurement and mitigation strategies were developed for situations influenced by Karst geology.

BACKGROUND

In December 1995 some homes in Livingston, Tennessee, with installed mitigation systems were found to have elevated indoor radon levels. The Tennessee Radon Program through the Tennessee Department of Environment and Conservation (TDEC), SRRTC and EPA Region 4 began an investigation to determine the causes of these apparent failures. It was found that the region's Karst geology, which exhibits significant fissures and voids in the underlying limestone formations, plays a major role in the radon behavior observed in these houses, such as large and rapid fluctuations in indoor and subsurface radon concentrations.

As a result of these effects, standard measurement, diagnostic and mitigation procedures may be inadequate to quantify the magnitude and temporal variation of radon concentrations to design effective radon control systems in areas where Karst geology plays an important role.

This investigation then focused on formulating modified strategies for reliable radon measurement and system design and evaluation that are applicable in this and other geographically similar areas. The diagnostic and design methods developed permit investigators to specify system mechanical performance parameters and then to predict and simulate an installed system's actual mechanical performance for those more demanding situations such as difficult-to-mitigate houses and large buildings.

COURSE CONTENT

Topics covered in this course include:

- Overview of measurement and mitigation efforts in Karst areas
- Summary of activities in the Livingston TN project
- Analysis and use of results in system design, system performance prediction, simulation and verification
- Summary of findings and their implications
- Explanation of EPA recommendations for radon measurement in karst areas
- Technical basis for mitigation system design recommendations

Radon Mitigation and System Design in Large Buildings Workshop

May 6-7, 2009 – Louisville, Kentucky

This workshop introduces a procedural framework for the investigation of large buildings and the design of radon mitigation strategies based on the results of that investigation. Participants will perform a diagnostic investigation of a large (non-residential) building and design a mitigation strategy for the building. Investigative procedures will include:

- Evaluation of radon test data
- Building plan examination
- Determination of HVAC system design and operation
- Field verification of building structural and mechanical characteristics
- Assessment of building pressure relationships
- Identification of potential radon entry points
- Field exercises in building investigation, diagnostics and system design
- Design a mitigation strategy for a building

Procedures for an Active Soil Depressurization (ASD) system design method which treats ASD as air-handling systems will be presented during this workshop. This includes the determination of required extent and strength of pressure fields; determination of system resistance characteristics and required airflows; and performance requirement-based selection of system components and configurations.

CONTINUING EDUCATION CREDITS

SRRTC will provide 16 hours of continuing education credits for certified measurement and mitigation specialists with the NEHA/NRPP. A certificate of attendance will be provided to all participants.

Logistical Details for Meeting Room Space and Hotel Information Will be Mailed to All Registrants before the Classes

You must be Pre-Registered to Attend these Workshops

Register Early – There will be Limited Enrollment for Both Workshops!!

REGISTRATION INFORMATION

To register for the workshops, please complete the registration form and return to Auburn University with payment. All registrants will receive a confirmation package including study materials, logistical details, agenda and other information. You may also register online at www.engce.auburn.edu. There will be limited enrollment for workshops.

( ) Karst Measurement & Mitigation in Karst Workshop–May 5, 2009–Kentucky Resident – $175
( ) Karst Measurement & Mitigation in Karst Workshop–May 5, 2009–Non-KY Resident – $250

( ) Radon Mitigation & System Design Large Buildings–May 6-7, 2009–Kentucky Resident – $250
( ) Radon Mitigation & System Design Large Buildings–May 6-7, 2009– Non KY Resident – $300

First Name MI Last Name

Company_____

Address_____

City_____ State_____ ZipCode+4_____

Business Phone _____ Fax Phone_____ E-mail_____

( ) Check enclosed payable to Auburn University Credit Card ( ) Visa ( ) MasterCard

Credit Card#_____ Exp Date_____

Signature_____

Please complete and return registration with payment to:

Southern Regional Radon Training Center
217 Ramsay Hall
Auburn, AL 36849-5376
800-626-2703 or 800-446-0382 or Fax 334-844-5715
www.engce.auburn.edu or email: carricj@auburn.edu

SRRTC
Southern Regional
Radon Training Center

Sponsors for the Continuing Education Radon Workshops
Louisville, Kentucky
May 5-7, 2009

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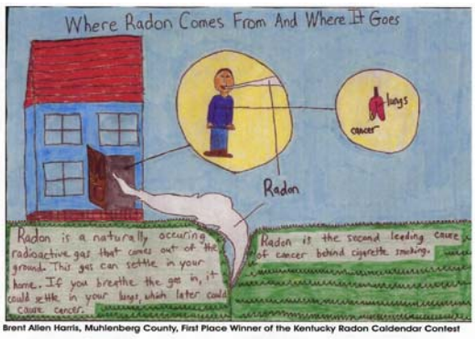

Brent Allen Harris, Muhlenberg County, First Place Winner of the Kentucky Radon Calendar Contest

Kentucky Radon Program

For RADON Information Contact Health Department or County Extension Agent

Barren River District

Promote

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